Active Recombinant Mouse Sirt3 protein, His-tagged

Cat. No. Sirt3-1375M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse Sirt3 protein(Q8R104)(5-257 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	5-257 aa
Form	100mM NaHCO3, 500mM NaCl, pH8.3, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Sirtuin 3 (SIRT3) also known as NAD-dependent deacetylase sirtuin-3isamember of the mammalian sirtuin family of proteins. SIRT3 is a solubleproteinlocated in the mitochondrial matrix, and contains a mitochondrial processing peptide at the N-terminus. It is a key regulator of succinate dehydrogenase(SDH), which catalyzes the oxidation of succinate to fumarate. Increased succinate concentrations and the specific G protein-coupled receptor 91 (GPR91) areinvolved in the activation of hepatic stellate cells (HSCs). SIRT3 agonists could help treat metabolic disorders such as obesity, metabolic syndrome andtype2 diabetes. Besides, Dihydrolipoyl Transacetylase (DLAT) has been identified as an interact or of SIRT3, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse SIRT3 and recombinant mouse DLAT. Briefly, SIRT3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samplesof 100uL were then transferred to DLAT-

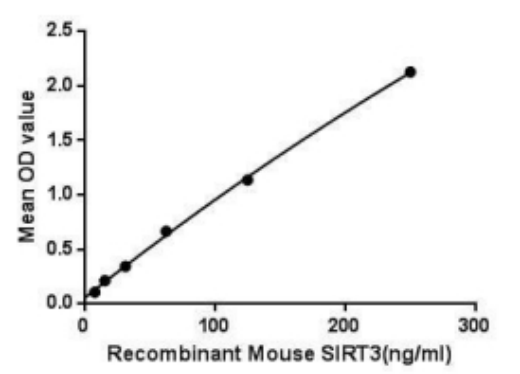
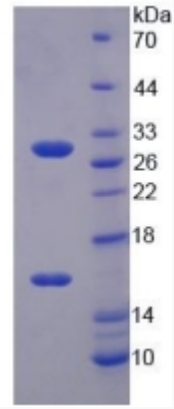
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	coated microtiter wells and incubatedfor 2hat 37°C. Wells were washed with PBST and incubated for 1h with anti-SITR3pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µstopsolution to the wells and read at 450nm immediately. The binding activity of SIRT3 and DLAT was shown, and this effect was in a dose dependent manner.
Molecular Mass	32.2kDa
Purity	> 90%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in ddH2O to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	Sirt3 sirtuin 3 (silent mating type information regulation 2, homolog) 3 (S. cerevisiae) [Mus musculus]
Official Symbol	Sirt3
Synonyms	SIRT3; sirtuin 3 (silent mating type information regulation 2, homolog) 3 (S. cerevisiae); NAD-dependent deacetylase sirtuin-3; mSIR2L3; SIR2-like protein 3; SIRT3L mitochondrial; mitochondrial protein lysine deacetylase; silent mating type information regulation 2, (S.cerevisiae, homolog)-like 3; Sir2l3; AI848213; 2310003L23Rik;
Gene ID	64384

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mRNA Refseq	NM_001127351
Protein Refseq	NP_001120823
Activity	
SDS-PAGE	

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